

# **EXHIBIT 11**

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF PENNSYLVANIA**

**DONALD J. TRUMP FOR PRESIDENT,  
et al.,**

**Plaintiffs,  
v.**

**KATHY BOOCKVAR, in her capacity as  
Secretary of the Commonwealth of  
Pennsylvania, et al.,**

**Defendants**

**No. 2:20-CV-966**

**EXPERT REPORT OF**

**Robert M. Stein, Ph.D.**

**ON BEHALF OF DEFENDANTS  
KATHY BOOCKVAR, in her capacity as  
Secretary of the Commonwealth of  
Pennsylvania, et al.**

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## **I. Background and Qualifications**

I am a fellow in urban politics at the Baker Institute and the Lena Grohlman Fox Professor of Political Science at Rice University. I am also the faculty director of Rice's Center for Civic Leadership. A copy of my curriculum vitae is attached as Appendix A. I am being compensated at \$250 per hour for my efforts.

My current research focuses on alternative modes of elections and voting procedures in the U.S. and emergency preparedness for, behavioral response to, and risk assessment of severe weather events. My work has been supported by the National Science Foundation, the City of Houston's Office of Public Safety and Homeland Security, and the Pew Charitable Trusts, among others. Some of my select publications include "Reducing the Undervote with Vote by Mail" (published in *American Politics Research*), "Election Administration during National Disasters and Emergencies: Hurricane Sandy and the 2012 Election" (published in *Election Law Journal*), and "The Effect of Election Day Vote Centers on Voter Participation" (published in *Election Law Journal*). A complete list of my publications is included in my attached curriculum vitae.

Since 2010, I have been an expert witness in several cases involving election administration and voting. I have consulted for several jurisdictions in the design, implementation, and evaluation of alternative voting systems, including early voting, Election Day vote centers, mail-assisted voting, and in-person polling locations. In these jurisdictions, I have worked closely with election administrators and elected officials to fulfill their obligation to conduct elections. These jurisdictions include: Collin, Harris, and Lubbock Counties, Texas; 64 Colorado counties that make up the Colorado County Clerks Association; and Albuquerque, New Mexico.

I have been retained by counsel for Kathy Boockvar (the "Secretary"), Secretary of the Commonwealth of Pennsylvania (the "Commonwealth"), to provide expert testimony on the use of secure ballot receptacles ("drop boxes") for the return of mail-in and absentee ballots (collectively, "mail-in ballots") in the Commonwealth during the November 3, 2020 general election (the "General Election"). Specifically, I have been asked to (1) provide context on voting by mail-in ballots ("mail-in voting") in the Commonwealth, including by providing an overview of practices in sister states; (2) assess the impact of using drop boxes on voter turnout, voter confidence and satisfaction, and the costs of conducting elections; and (3) evaluate whether there is any heightened risk of voter fraud with drop boxes as compared to without drop boxes.

## **II. Summary of Opinions**

Based on my scientific expertise and the empirical evidence, my expert opinion is that the Commonwealth's use of drop boxes provides a number of benefits without increasing the risk of mail-in or absentee voter fraud that existed before drop boxes were implemented because (manned or unmanned) they are at least as secure as U.S. Postal Service ("USPS") mailboxes, which have been successfully used to return mail-in ballots for decades in the Commonwealth and elsewhere around the U.S.

Increasing the number of locations where voters can return their voted ballot, including through the use of drop boxes, has been shown to increase turnout, which is an important consideration in any election, but particularly during a global pandemic and where research has shown that natural and manmade disasters have historically had a depressive effect on voter turnout.

Drop boxes are widely used across a majority of states as a means to return mail-in ballots. I am not aware of any studies or research that suggest that drop boxes (manned or unmanned) are a source for voter fraud. I am also unaware of any evidence that drop boxes have been tampered with or led to the destruction of ballots.

### **III. Materials Reviewed**

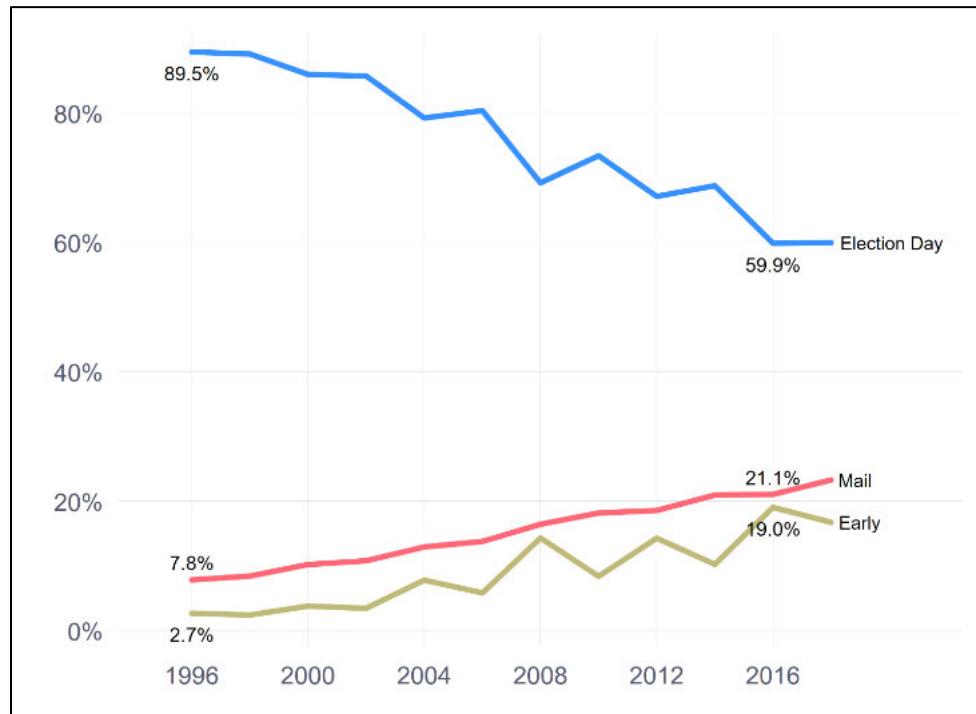
To establish an expert opinion in this case, I reviewed a variety of materials from academic, governmental, legal, and media sources. Building on my existing knowledge, expertise and experience, I reviewed scholarly research on the effects of mail-in voting and the use of drop boxes. My review also included data sources and summaries of state-by-state election laws prepared by federal and state agencies and correspondence with colleagues. I also reviewed news coverage of 2019 Pa. Legis. Serv. Act 2019-77 (S.B. 421) (“Act 77”), mail-in voting, and the use of drop boxes. I further reviewed the decision of the Pennsylvania Supreme Court dated September 17, 2020, which held that drop boxes enfranchise the electorate and are permitted in the Commonwealth. Finally, I reviewed discovery materials produced by Plaintiffs in this litigation. The sources on which I relied are cited in the footnotes of this report or listed in Appendix B, the bibliography to this document.

### **IV. Mail-In Voting**

#### **A. History of Mail-In Voting**

Mail-in voting has been practiced in U.S. federal elections since 1864. In 1978, California (Patterson and Calderia 1995) was the first state to adopt no-excuse mail-in voting, allowing all eligible voters to vote by mail-in ballots even if in the jurisdiction on Election Day and without qualifying excuses. Since then, the practice has expanded dramatically. By 2018, 27 states had adopted no-excuse mail-in ballot systems. More recently and largely due to the threat of the COVID-19 pandemic, all but seven states now allow no-excuse mail-in voting. The remaining seven states allow mail-in voting for persons over 65 years of age, disabled persons, persons out of the jurisdiction on Election Day, and, in some states, incarcerated persons.

The popularity of mail-in voting is best measured by the proportion of votes cast by mail. As is apparent in Figure 1 below, since the turn of the century, the share of votes cast by all forms of mail-in voting has risen nearly three-fold, from 7.8% in 1996 to 21.1% in 2016.

Figure 1: Fraction of Ballots Cast by Different Voting Modes, 1996-2016

*Source: U.S. Census Bureau, Current Population Survey,  
Voting and Registration Supplement*

## B. Types of Mail-In Voting<sup>1</sup>

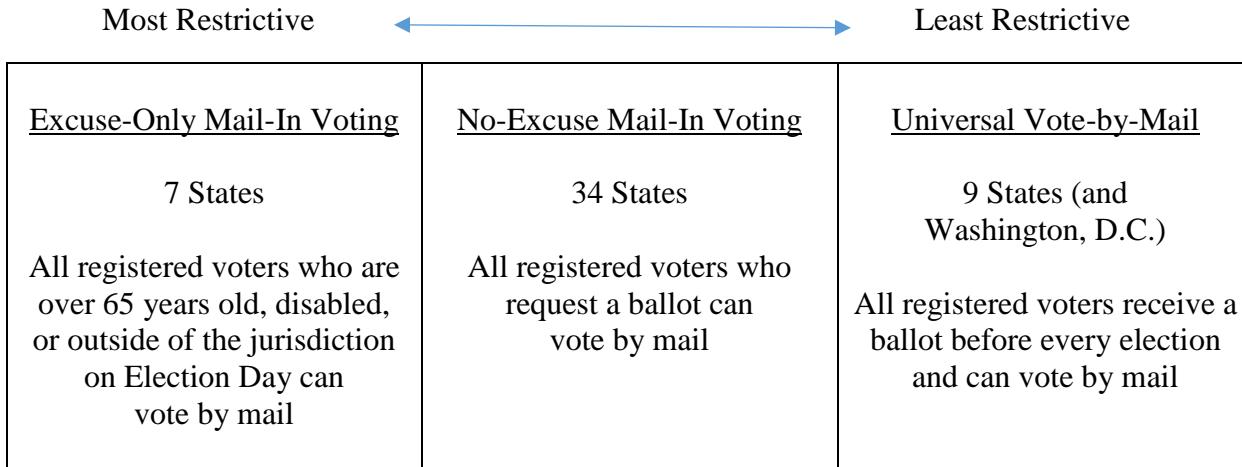
In the General Election, all states will allow at least some of their voters to cast their ballots by mail. Mail-in voting, however, comes in a number of forms and there is no single mode of mail-in voting. Instead, consistent with the U.S. federal system, states offer different options for mail-in voting and also allow for local variation within each state to account for localized considerations.

There are three distinct types of mail-in voting defined largely by who can vote by mail and how voters obtain and return their mail-in ballots. The most restrictive form of mail-in voting is excuse-only mail-in voting. Seven states restrict mail-in voting to certain persons, usually voters who are over 65 years old, are disabled, or will be outside of the jurisdiction on Election Day. The largest number of states (34), practice no-excuse mail-in voting, allowing any persons to vote by mail regardless of whether they have a reason or whether they will be out of their jurisdiction on Election Day. In these 41 states that employ excuse-only mail-in voting or no-excuse mail-in

<sup>1</sup> <https://www.ncsl.org/research/elections-and-campaigns/absentee-and-early-voting.aspx>

voting, persons eligible to vote by mail must request a mail-in ballot prior to the election.<sup>2</sup> Additionally, nine states conduct universal vote-by-mail elections in which the state (or a local entity, such as a county or municipality) mails all registered voters a ballot before each election without voters' having to request them.

Figure 2: Mail-In Voting in the U.S.



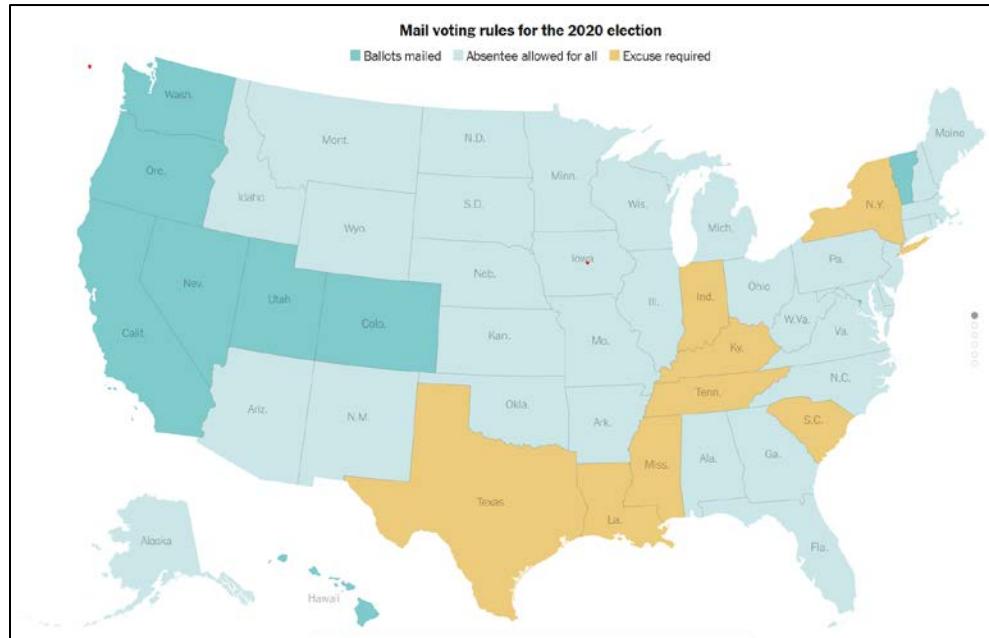
Until the enactment of Act 77 in October 2019, the Commonwealth employed excuse-only mail-in voting, which limited mail-in voting to a select group of voters, including disabled voters or voters outside of the jurisdiction on Election Day. With the adoption of Act 77, the Commonwealth became a no-excuse mail-in voting state, allowing any qualified voter to request and submit a mail-in ballot without providing a reason (while maintaining its previously existing and parallel absentee voting system).

Importantly, like many other no-excuse mail-in voting states, voters in the Commonwealth cannot obtain mail-in ballots without applying for one, unlike universal vote-by-mail states where every voter receives a mail-in ballot. In that respect, the Commonwealth's current requirements for mail-in voting are similar to those used in the other 33 states in which no-excuse mail-in voting is allowed.<sup>3</sup>

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<sup>2</sup> Although some states allow voters to request a mail-in ballot online, most require mail-in ballots to be requested in person or by mail. Some states have permanent mail-in voting for those eligible for mail-in voting. This allows the eligible mail-in voter to obtain a mail-in ballot before each election without having to make a request for each election. In the Commonwealth, voters can request mail-in ballots for all elections for which they are eligible to vote in a given year through a single application.

<sup>3</sup> My understanding is that some counties in the Commonwealth began using drop boxes in the Primary Election in response to the influx of mail-in ballots under the new no-excuse mail-in voting system created by Act 77 and the COVID-19 pandemic.

**Figure 3: Mail-In Voting Rules by State**

Source: <https://www.nytimes.com/interactive/2020/08/11/us/politics/vote-by-mail-us-states.html>

### C. Methods of Returning Mail-In Ballots

One feature of some mail-in voting systems is the variety of options for where voters can return their mail-in ballots. These options include returning mail-in ballots (1) through the USPS, (2) in person at a designated office, or (3) at a designated drop box.

Considering how mail-in ballots are returned, mail-in voting is in some ways a misnomer. Indeed, research has shown that the majority of mail-in ballots are actually delivered in person. Menger and Stein (2018; 2020) report that most mail-in ballots in states with mail-in voting are returned in person at drop-off locations, whether at drop boxes or other sites designated in the various states. This trend in how mail-in ballots are returned has been consistent since the adoption of mail-in ballots in these states.

For example, in the states that have adopted universal vote-by-mail systems, the majority of voters do not return their ballots through the mail. Instead, nearly two-thirds of voters in universal vote-by-mail states return their ballots in person at convenient and secure drop boxes other than by mail or at the office of the local election body (Menger and Stein 2020). These drop boxes tend to be centrally located in residential neighborhoods and where voters work, shop, and travel.<sup>4</sup> Drop boxes are secure structures, in some instances equipped with cameras for surveillance.

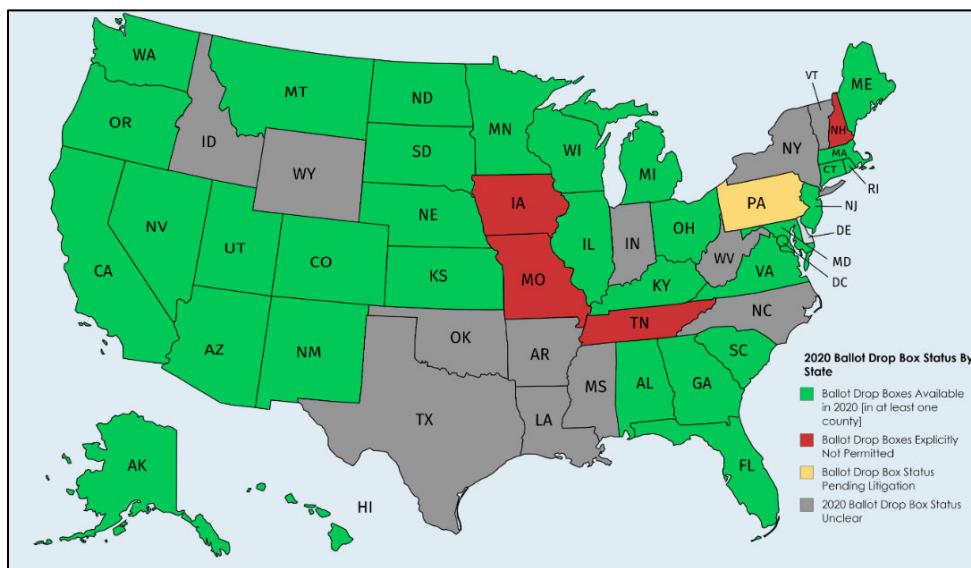
In the Commonwealth, like other states, mail-in or absentee voters (“mail-in voters”) have several options for returning their mail-in ballots. They can return their mail-in ballot through the

<sup>4</sup> [https://www.eac.gov/sites/default/files/electionofficials/vbm/Ballot\\_Drop\\_Box.pdf](https://www.eac.gov/sites/default/files/electionofficials/vbm/Ballot_Drop_Box.pdf)

USPS, deliver the ballot in person to the county board or other satellite offices, or deposit the ballot at any available drop boxes.

By authorizing the use of drop boxes, the Commonwealth has joined at least 34<sup>5</sup> states and Washington, D.C. in allowing voters to submit their mail-in ballots in person at sites other than their county (or other local) election board. In other words, the majority of states that allow excuse-only or no-excuse mail-in voting, including the Commonwealth, have authorized the use of drop boxes for mail-in ballots (e.g., Arizona, California, Hawaii, Montana, Nebraska, and New Mexico).

Figure 4: Use of Drop Boxes by State



Source: <https://www.lawfareblog.com/rise-ballot-drop-boxes-due-coronavirus>

The U.S. Department of Homeland Security (“DHS”), through the Cybersecurity and Infrastructure Security Agency Elections Infrastructure Government Coordinating Council and Sector Coordinating Council’s Joint COVID Working Group, defines a drop box as “a secure and convenient means for voters to return their mail[-in] ballot. A drop box is a secure, locked structure approved by election officials where voters may deliver their ballots from the time they receive them in the mail up to the time polls close on Election Day. Drop boxes can be staffed or unstaffed, temporary or permanent.”<sup>6</sup>

The requirements for drop boxes vary across states. The National Conference of State Legislatures has aggregated and summarized some of these differences.<sup>7</sup> Arizona, for example,

<sup>5</sup> <https://www.ncsl.org/research/elections-and-campaigns/vopp-table-9-ballot-drop-box-definitions-design-features-location-and-number.aspx>; <https://www.lawfareblog.com/rise-ballot-drop-boxes-due-coronavirus>; <https://www.democracy.works/blog/dropboxes>

<sup>6</sup> [https://www.eac.gov/sites/default/files/electionofficials/vbm/Ballot\\_Drop\\_Box.pdf](https://www.eac.gov/sites/default/files/electionofficials/vbm/Ballot_Drop_Box.pdf)

<sup>7</sup> <https://www.ncsl.org/research/elections-and-campaigns/vopp-table-9-ballot-drop-box-definitions-design-features-location-and-number.aspx>

only requires that drop boxes be “secure” without defining specific steps needed to secure the ballot box. In California, drop boxes must be “constructed to withstand vandalism, with a clearly identified ballot insertion slot and a unique identifying number.”<sup>8</sup> In Oregon, New Mexico and Colorado, drop boxes must be monitored by an election official or video surveillance. Drop boxes in Montana must be staffed with election officials. Washington only requires that drop boxes be designed to prevent the overflow of mail-in ballots. It is noteworthy that I am only aware of four states (i.e., Tennessee, New Hampshire, Missouri, and Iowa) that have explicitly disallowed drop boxes at this time.<sup>9</sup>

I also understand that Plaintiffs are challenging the differing use of drop boxes across counties in the Commonwealth, but my review suggests that it is not unusual for various counties within a state to have variation in their use of drop boxes, including with regard to the number, location, and type of drop box.<sup>10</sup> For example:

- In California, county election officials determine the location and number of drop boxes.
- In Colorado, county election officials determine the location of drop boxes and must have at least one for every 30,000 registered voters in the county.
- In Hawaii, county election officials determine the location and number of drop boxes.
- In New Mexico, county election officials determine the location of drop boxes.
- In Oregon, county election officials consider various factors in determining drop box locations to the extent they place them in any other locations besides the county elections office or court house (where the state requires each county to keep a drop box). Oregon further requires at least one “dropsite” for every 30,000 active registered voters and a dropsite within at least four miles of each public university or community college.
- In Washington, drop boxes must be located at each voting center and at least one other location. Washington also requires that there be at least one drop box per 15,000 registered voters in a county and at least one drop box in each city, town, and place with a post office. Washington further requires that there be at least one drop box on an Indian reservation at a location selected by the tribe and accessible by a public road.

Such variation between counties even within a state makes sense, since the needs of different counties vary and their use of drop boxes reflects those considerations (e.g., the geographic size of a county, the population of the county, and the ease with which voters in the county can access other locations to return mail-in ballots).

## V. Benefits of Drop Boxes

Among other benefits, drop boxes are chiefly beneficial in that they increase voter turnout, especially during natural disasters akin to the COVID-19 pandemic, increase voter confidence and

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<sup>8</sup> <https://www.ncsl.org/research/elections-and-campaigns/vopp-table-9-ballot-drop-box-definitions-design-features-location-and-number.aspx>

<sup>9</sup> <https://www.lawfareblog.com/rise-ballot-drop-boxes-due-coronavirus>

<sup>10</sup> <https://www.ncsl.org/research/elections-and-campaigns/vopp-table-9-ballot-drop-box-definitions-design-features-location-and-number.aspx>

satisfaction, and decrease the costs and the other administrative burdens counties would otherwise have to bear to support the increased number of voters.

### A. Increased Voter Turnout in Natural Disasters

It is my considered opinion that drop boxes have a positive effect on voter turnout. Specifically, my own research (Menger and Stein 2020) and that of others (McGuire, et al. 2020; Collinwood, et al. 2018) suggests that providing voters with additional locations to return their mail-in ballots has a positive effect on voter turnout. Collingwood, et al. (2017) and McGuire, et al. (2020) show voter turnout increases with the number of drop boxes available in a voting jurisdiction. Their research further supports that voter turnout increases when drop boxes and return sites are put in places that are centrally located to residential neighborhoods and where voters work, shop, and travel.

While increasing voter turnout is desirable in any election, there is particular reason to implement measures that will increase turnout during a pandemic, like the Commonwealth and other states face now. I have studied the effects of natural and manmade disasters on elections and the way in which these emergencies have historically depressed turnout and strained Election Day participation. There is compelling evidence that natural and manmade disasters depress voter turnout and that increasing the methods by which people can vote has a strong corrective effect on these sorts of disruptions (Stein 2015).

It is my considered opinion that expanding mail-in voting, and providing drop boxes, should serve as a corrective for the depressing effects the COVID-19 pandemic will likely have on voter turnout. Among other reasons, expanding mail-in voting and allowing mail-in ballots to be returned to drop boxes decreases the concentration of voters at in-person polling locations on Election Day, which decreases lines, expedites the voting process, reduces the amount of time voters have to spend in enclosed areas that may restrict social distancing, and thus increases turnout. As DHS has observed, “[s]etting up ballot drop boxes and educating voters to use them mitigates a number of COVID-19-related risks associated with in-person voting. It also minimizes the number of people that will need to access voting locations, thereby providing more space for those who are engaged in in-person voting.”<sup>11</sup>

For example, in 2012, Hurricane Sandy made landfall along the entire eastern seaboard between Florida and Maine less than a week before that year’s general election. In that instance, I found “that the negative effect Hurricane Sandy had on voter participation was significantly muted in those states that afforded their voters opportunities to vote before Election Day, i.e., early in-person voting and no-excuse mail-in voting” (2015:1). Election officials had just days to respond to the effect Hurricane Sandy had on conducting the 2012 general election. Though the application deadline to vote by mail had already passed in affected states, in-person early voting (e.g., Maryland) and the use of provisional ballots significantly sustained voter turnout in the aftermath of Hurricane Sandy.

There is substantial evidence that even bad weather on Election Day substantially reduces voter turnout (Gomez, et al. 2007). The negative effects that bad weather on Election Day has on

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<sup>11</sup> [https://www.eac.gov/sites/default/files/electionofficials/vbm/Ballot\\_Drop\\_Box.pdf](https://www.eac.gov/sites/default/files/electionofficials/vbm/Ballot_Drop_Box.pdf)

voter turnout is offset by the higher proportion of votes cast by mail, in any type of mail-in voting system, before Election Day (Johnson 2014).

Unlike the effects of Hurricane Sandy or bad weather, the early and persistent threat from COVID-19 has allowed election officials ample time to devise ways to protect voters and poll workers when they vote during the pandemic. Many states and jurisdictions have expanded opportunities for mail-in voting (e.g., the Commonwealth), extended days, hours, and locations of in-person voting, and expanded the locations where mail-in ballots can be returned by introducing drop boxes. Research suggests that these actions have helped to protect voters and poll workers from COVID-19 and contributed to sustained voter turnout (Hood and Haynes 2020).

The General Election will occur during a pandemic when voters might prefer to vote by mail or deliver their ballots in person at locations where the threat of contracting and spreading COVID-19 is minimal (e.g., by returning their ballot to unmanned drop boxes). Drop boxes provide voters the opportunity to safely cast their ballots with reduced fear from the virus. The 2012 general election provides evidence that alternatives to voting in person on Election Day during natural disasters can maintain voter turnout in the face of disruptions to the conduct of elections (Stein 2015).

## **B. Decreased Costs and Administrative Burdens**

Mail-in voting, including through the use of drop boxes, should help to significantly reduce and even eliminate expenditures for in-person voting location rental fees, voting machines, and personnel to manage polling locations. In 2016, using my research, the Pew Charitable Trusts assessed the costs of conducting elections before and after Colorado adopted mail-in voting in 2013.<sup>12</sup> Costs decreased by an average of 40% in five election administration-related categories. The 46 (of 64) counties with data available spent about \$9.56 per vote in the 2014 general election, compared with nearly \$16 in the 2008 general election. These costs savings included the costs of drop boxes, which are not required to be manned in Colorado.

Manning in-person polling locations is a significant cost of conducting elections. Excuse-only and no-excuse mail-in voting should reduce the demand for poll workers and other personnel needed to operate in-person polling locations. Hostetter (2020) finds that the demand for and the use of poll workers is significantly lower in counties and states with no-excuse mail-in voting. Relatedly, in the absence of any requirement that they be manned, drop boxes mostly incur only a one-time, non-recurring cost. Manning drop boxes, however, incurs an additional recurring cost of approximately an average of \$13 per hour per individual manning a drop box.<sup>13</sup>

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<sup>12</sup> <https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2016/03/colorado-voting-reforms-early-results#:~:text=Colorado%20Voting%20Reforms%3A%20Early%20Results%202013%20election%20overhaul,experience%20for%20citizens%20Issue%20Brief%20March%2022%2C%202016>

<sup>13</sup> [https://www.payscale.com/research/US/Job=Elections\\_Clerk/Hourly\\_Rate](https://www.payscale.com/research/US/Job=Elections_Clerk/Hourly_Rate)

### C. Increased Voter Confidence and Satisfaction

A secondary but important benefit of drop boxes is that voters like using them and they increase voter confidence in mail-in voting. My own research has shown this, and DHS has recognized that “[s]ome voters prefer to deliver their mail[-in] ballots to a drop box rather than sending them back through the mail. These voters may be motivated by lack of trust in the postal process, fear that their ballot could be tampered with, or concern that their signature will be exposed. Voters may also be concerned about meeting the postmark deadline and ensuring that their ballot is returned in time to be counted.”<sup>14</sup>

DHS has also acknowledged other benefits, including that “the availability of ballot drop boxes and drop-off locations ensures that even voters who wait until the last minute to vote or who receive their requested ballot in the mail at the last minute will be able to return their ballots in time to be counted.”<sup>15</sup>

Figure 5 below reports the results of a survey conducted with voters in Colorado after the 2014 general election. Voters who reported returning their mail-in ballots at a drop-off location, such as a drop box, were significantly more likely to report that they were “very confident” that their “vote in the general election was counted as [they] intended” than voters who returned their mail-in ballot by mail.

Figure 5: Confidence That Vote Was Counted as Intended by Method of Mail-In Ballot Return

	Mail	Drop-Off Location
Very Confident	67%	71%
Somewhat Confident	27%	24%
Not Too Confident	3%	2%
Not At All Confident	2%	1%
Do Not Know/Refused	1%	2%

*Source: Menger and Stein 2020*

We might expect that a person who returns his or her mail-in ballot in person to a drop off location, such as a drop box, incurs a greater cost in time and inconvenience than a voter who chooses to return his or her mail-in ballot by mail, which could just be placed in the voter’s own mailbox. As a result, we might expect that the increased cost and inconvenience borne by those who return their mail-in ballots in person might result in these voters’ negatively evaluating their overall voting experience with mail-in voting elections. However, Figure 6 below reports the satisfaction of Colorado voters with their voting experience during the 2014 general election by how they returned their mail-in ballots (i.e., by mail or in person). The results show that voters who returned their ballots by mail and those who returned their ballots in person expressed the

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<sup>14</sup> [https://www.eac.gov/sites/default/files/electionofficials/vbm/Ballot\\_Drop\\_Box.pdf](https://www.eac.gov/sites/default/files/electionofficials/vbm/Ballot_Drop_Box.pdf)

<sup>15</sup> [https://www.eac.gov/sites/default/files/electionofficials/vbm/Ballot\\_Drop\\_Box.pdf](https://www.eac.gov/sites/default/files/electionofficials/vbm/Ballot_Drop_Box.pdf)

same very high level of satisfaction with the “mail-in” voting process they chose. Indeed, 95% or more voters indicated they were “satisfied” or “very satisfied.”

Figure 6: Satisfaction with Overall Voting Experience by Method of Mail-In Ballot Return

	<u>Mail</u>	<u>Drop-Off Location</u>
Very Satisfied	59%	59%
Satisfied	37%	36%
Dissatisfied	3%	3%
Very Dissatisfied	2%	1%

*Source: Menger and Stein 2020*

Issues regarding voter confidence and voters’ desire to return mail-in ballots in person are likely to be even more pronounced in the General Election given the recent and well-publicized delays and other issues facing the USPS. Notably, on July 29, 2020, the USPS informed the Commonwealth that “to the extent that the mail is used to transmit ballots to and from voters, there is a significant risk that, at least in certain circumstances, ballots may be requested in a manner that is consistent with [the Commonwealth’s] election rules and returned promptly, and yet not returned in time to be counted.”<sup>16</sup> Multiple media reports and analyses have similarly confirmed delays and issues.<sup>17</sup> Given these issues, voters are likely to have well-founded concerns regarding returning their mail-in ballots through the USPS (including whether their mail-in ballot will arrive on time) and voter confidence is likely to be that much greater if voters use in-person delivery methods, including drop boxes.

## VI. Absence of Voter Fraud Related to Drop Boxes

It is my considered opinion that the use of drop boxes offers important benefits, like improving voter turnout, without increasing the potential risk of voter fraud that is already present under a system of mail-in voting through the USPS. What the Commonwealth now refers to as mail-in voting almost exactly mirrors the procedures and rules used for what the Commonwealth has historically referred to as absentee voting. Given that an absentee ballot cast before the enactment of Act 77 would have been treated the same way a mail-in ballot cast now will be treated, and all the same protections that existed before are still in place, the narrow question is whether the newly introduced drop boxes are less secure than a USPS mailboxes, which have been used for returning absentee ballots in the Commonwealth and elsewhere for decades.

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<sup>16</sup> Letter from Thomas J. Marshall to Hon. Kathy Boockvar (July 29, 2020)

<sup>17</sup> <https://www.forbes.com/sites/alisondurkee/2020/08/14/postal-service-usps-warns-mail-in-ballots-in-46-states-may-not-be-delivered-in-time-election/#a2140ce17e6b>;  
[https://www.washingtonpost.com/local-md-politics/usps-states-delayed-mail-in-ballots/2020/08/14/64bf3c3c-dcc7-11ea-8051-d5f887d73381\\_story.html](https://www.washingtonpost.com/local-md-politics/usps-states-delayed-mail-in-ballots/2020/08/14/64bf3c3c-dcc7-11ea-8051-d5f887d73381_story.html);  
<https://www.nytimes.com/2020/08/14/us/politics/usps-vote-mail.html>

As explained in more detail below, there is no reason to think that a USPS mailbox provides any greater protection against voter impersonation, including so-called “ballot harvesting” or double voting, than a drop box. And despite the pervasive use of drop boxes, I am not aware of any studies or reports suggesting there is a correlation between the use of such drop boxes and an increase in fraud or any evidence that anyone has tampered with drop boxes to damage mail-in ballots or the boxes themselves.

#### **A. Risk of Voter Fraud in Mail-in Voting**

As a general matter, there is little evidence of voter fraud. Mail-in voting, regardless of the methods of ballot return, is no exception. Opponents of mail-in voting (including, as I understand it, Plaintiffs in this case) claim this mode of voting is “the largest source of potential voter fraud” (Federal Commission on Federal Election Reform 2005:46; Second Amended Complaint ¶ 67). The *potential* for voter fraud, however, must not be confused with the *commission* of voter fraud (i.e., just because something is theoretically possible does not mean that it has occurred, it is likely to occur, or it will actually occur).

Potential voter fraud comes in a number of forms, including the casting of multiple ballots (i.e., double voting), illegal ballots (i.e., voting by non-eligible persons), and voter impersonation (i.e., casting another person’s ballot).

Voter impersonation and double voting are typically offered as ways in which mail-in voting might hypothetically result in voter fraud. Voter impersonation occurs when one person collects, completes, and submits another person’s mail-in ballot without his or her permission and knowledge. To guard against voter impersonation in mail-in voting, several states have enacted laws that prevent ballot harvesting (e.g., Arizona, California, Montana, North Carolina, and Texas limit by statute the number of mail-in ballots that can be submitted by a person).<sup>18</sup> Ballot harvesting is defined, in my view, as the gathering and submitting of mail-in ballots by third-party individuals, volunteers or workers, rather than the voters themselves mailing in their ballots or submitting them directly to a ballot collection site. Simply enacting laws against ballot harvesting, which limit the number of mail-in ballots any person can submit, is an effective prophylactic against voter impersonation.

Double voting is most likely to occur when the same person is registered to vote in multiple jurisdictions and casts a ballot in the same election in more than one jurisdiction. Double voting can also occur when the same person casts a ballot by mail and in person in the same election in the same jurisdiction. For instance, a voter might request, receive, and complete a mail-in ballot and intentionally or by error vote in person on or before Election Day. However, the maintenance of electronic voter books and records of who requested a mail-in ballot (which I understand the Commonwealth and the various county boards of elections maintain) are effective ways to guard against this form of double voting. In such scenarios, voters who request a mail-in ballot and then attempt to vote in person are detected when they appear to attempt to vote in person. In most instances, these voters are required to surrender their mail-in ballot before voting in person if they wish to cast a standard or regular ballot or else are required to cast an in-person provisional ballot.

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<sup>18</sup> [https://en.wikipedia.org/wiki/Ballot\\_collection](https://en.wikipedia.org/wiki/Ballot_collection)

Past evidence of voter fraud has been scant (Levitt 2007; Minnite 2010; McDonald and Levitt 2008). The low instance of successful prosecution of voter fraud further supports the conclusion that voter fraud is rare. Recent advances in record linkage have made it possible to obtain national and local level measures of the instance of double voting (Elmagarmid, Ipeirotis, and Verykios 2007; Enamorado, Fifield, and Imai 2019; Sadinle 2017; Steorts, Hall, and Fienberg 2016; McVeigh and Murray 2017). Using these new methodologies for detecting double voting, Goel, et al. (2020) estimated “how many people voted twice in the 2012 presidential election” (2020:1). The authors concluded:

The evidence compiled in this article suggests that double voting is not currently carried out in such a systematic way that it presents a threat to the integrity of American elections...[w]ith measurement error in turnout records possibly explaining a significant portion, if not all, of [double voting] (2020:12).<sup>19</sup>

Plaintiffs in this case cite the possibility of double voting as a potential hazard associated with vote by mail. Goel, et al. (2020) findings would suggest this claim is unwarranted nationally and in the City of Philadelphia, the Commonwealth’s largest city.

Beyond anecdotal news reports of ballot harvesting, there is no systematic evidence of ballot-harvesting results in voter fraud (Levitt 2007; Minnite 2010; McDonald and Levitt 2008). All states allow mail-in ballots to be returned for persons who are unable to do so for themselves. The empirical question is whether the collection and return of mail-in ballots by third parties has been a significant source of voter fraud, sufficient to change the outcome of elections. The commission of voter fraud from the use of unmanned or unmonitored drop boxes is unlikely. States like New Mexico and Colorado that have used mail-in voting elections with unmanned drop boxes have not reported any instance of voter fraud or tampering with or attempting to destroy drop boxes or mail-in ballots within them. I know of no instance where counties in these two states reported drop box tampering resulting in voter fraud.

Goel, et al. (2020:4) note that what appear to be intentional acts of voter fraud may in fact be due to human error. For example, the manual entry of who voted by voters or poll workers is prone to producing errors that appear to be double voting, but are not. A charge of voter fraud in a recent municipal election in Paterson, New Jersey illustrates this sort of “false positive” case of voter fraud. As the New York Times reported (Clossen 2020), “two elected officials were accused of delivering mail-in ballots that were not theirs and of submitting voter registration applications for people who were not eligible to vote.” Upon further investigation, however, it was determined that the ballots in question were disqualified because “they had been filled out incorrectly and not because they had been submitted illegally.” It is also important to note that the Paterson example concerned a case of universal mail-in voting, where the jurisdiction mailed

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<sup>19</sup> As a robustness test of their findings, Goel, et al. (2020) studied the City of Philadelphia’s voter registration and voter history files for records incorrectly marked as being used to cast a ballot. This would have generated error in detecting double voting and voter fraud. The researchers’ “interest [was] in identifying false positives: registrations that had an electronic record of voting, but were not listed as having voted in a poll book (2020:5).” Their findings confirmed earlier results that double voting was negligible.

every registered voter a ballot without the voter's having to request it. This is different from the Commonwealth's system where would-be mail-in voters have to request ballots or opt into the mail-in voting process. Similarly, the recent report of nine discarded mail-in ballots in Luzerne County does not suggest any voter fraud but mere unintentional administrative error that was promptly discovered, reported, and investigated.<sup>20</sup> Thus, careful examination of claims of voter fraud unearths errors of administration that can and have been effectively detected and corrected through standard election procedures.

## B. Security of Drop Boxes

As described above, a mail-in voter in the Commonwealth has several options from which to choose when returning his or her mail-in ballot, including (1) sending the ballot through the USPS, (2) delivering the ballot in person to a designated location such as a staffed county board of elections office, or (3) depositing the ballot at a drop box.

At least 34 states authorize the use of drop boxes in some or all of their counties (e.g., Arizona, California, Colorado, Hawaii, Kansas, Montana, Nebraska, New Mexico, Oregon, Utah, and Washington).<sup>21</sup> A drop box provides a location where voters can drop off mail-in ballots in sealed and signed envelopes. In some states, drop boxes are monitored with surveillance cameras. As discussed above, some states that permit or require drop boxes for returning mail-in ballots also set minimum requirements for where drop boxes must be located, how many a county must have, which hours they must be available and various security standards.

As previously discussed, the security requirements for drop boxes vary across states: some states have few requirements while others have many. Moreover, many counties within individual states have variations in the types, number, and security requirements of their drop boxes. It is my reasoned opinion that such variations are a feature in that they allow counties to adapt to specific needs of their jurisdiction and population, including adjusting to such factors as size, metropolitan/suburban/rural split, transportation characteristics, education levels, and more.

In the Commonwealth, the Secretary's mail-in ballot return guidance dated August 19, 2020<sup>22</sup> recommends many of the standards employed in other states that permit or require drop boxes. Among other things, the Secretary advises that counties utilizing drop boxes must consider the location, hours of operation, types, signage and security of drop boxes in line with best practices around the country.

The security recommended by the Secretary's guidance for drop boxes coupled with the various other checks on the mail-in ballot application and verification process are appropriate to

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<sup>20</sup> <https://justthene.ws.com/sites/default/files/2020-09/477493077-Luzerne-County-Press-Release.pdf>

<sup>21</sup> <https://www.ncsl.org/research/elections-and-campaigns/vopp-table-9-ballot-drop-box-definitions-design-features-location-and-number.aspx>; <https://www.lawfareblog.com/rise-ballot-drop-boxes-due-coronavirus>; <https://www.democracy.works/blog/dropboxes>

<sup>22</sup> [https://www.dos.pa.gov/VotingElections/OtherServicesEvents/Documents/PADOS\\_Ballot-Return\\_Guidance\\_1.0.pdf](https://www.dos.pa.gov/VotingElections/OtherServicesEvents/Documents/PADOS_Ballot-Return_Guidance_1.0.pdf)

deter and prevent tampering with deposited mail-in ballots or any other voter fraud without deterring accessibility to drop boxes.

Before the Primary Election, mail-in voters in the Commonwealth had been able to return their ballots to unmonitored USPS mailboxes (i.e., traditional blue postal boxes that appear in countless areas within the Commonwealth and other states) as well as a multitude of other types of locations where USPS mail is collected and similarly unmonitored (e.g., a voter's own mailbox, a neighbor's mailbox, the mailroom at a voter's job, or any other place that a voter might initiate a USPS mailing). Indeed, we trust that these USPS mailboxes are secure enough for a wide array of other important documents, including billions of dollars in stimulus and social security checks. Figures 7 and 8 below depict typical drop boxes used during the Primary Election in Erie and Philadelphia Counties. The design, appearance, and functionality of the drop boxes appears almost identical to USPS mailboxes in use before and after Act 77. This would suggest little has changed in the operation, security, and accessibility of methods to return mail-in ballots before or after counties in the Commonwealth began using drop boxes.

Figure 7: Drop Box Used in Erie County during Primary Election



*Source: <https://eriecountypa.gov/wp-content/uploads/2020/05/media-release-ballot-drop-box-5-6-20.pdf>*

Figure 8: Drop Box Used in Philadelphia County during Primary Election



*Source: <https://billypenn.com/2020/05/26/philly-vote-now-by-dropping-your-ballot-into-a-special-box-at-city-hall/>*

My understanding is that Plaintiffs have challenged the use of unmanned drop boxes in this case because they allege that the use of such drop boxes creates a risk of voter fraud, including with regard to potential ballot harvesting or the hypothetical tampering or destruction of drop boxes or mail-in ballots within them. In support of this claim, I understand that Plaintiffs have identified evidence, in the form of a limited set of photos or videos of individuals who they allege may have deposited more than one mail-in ballot into a drop box, which Plaintiffs refer to as “ballot harvesting.”<sup>23</sup>

As a threshold matter, Plaintiffs’ evidence does not definitively demonstrate any ballot harvesting (i.e., the *submitting* of a third party’s mail-in ballot). Indeed, the social media photographs Plaintiffs have produced merely show two different individuals’ holding what appear to be two different mail-in ballots each in the vicinity of drop boxes. But there is no conclusive evidence that the individuals portrayed in the images actually *submitted* the mail-in ballots of any third parties into the drop boxes. For example, each of the individuals could have just posed for a picture with two mail-in ballots, only deposited his own mail-in ballot into the photographed drop box, and then given the second mail-in ballot to its owner, who then deposited that mail-in ballot into the drop box on his or her own. Similarly, the individuals depositing those ballots could have been doing so on behalf of a spouse or other close family member who was just outside the picture frame, including directly beside the individual. In my opinion, this would

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<sup>23</sup> P002067; P002068; Exhibit G of Appendix of Materials in Support of Plaintiffs’ Motion to Modify and or Lift Stay Order, ECF 415-31; Elk County Video Clips (June 2, 2020)

by no means qualify as “ballot harvesting” or “voter fraud” through any reasonable interpretation of the terms.

The video surveillance of a drop box in Elk County that Plaintiffs have also produced suffers from the same problem: it is inconclusive. In particular, the video seems to demonstrate two individuals’ submitting two folded pages each into a drop box over the course of several hours of footage. But the video does not definitively portray that these individuals submitted two different *mail-in ballots* into the drop box. Instead, they could have submitted their own mail-in ballot and perhaps an affidavit of disability or any other document. In sum, Plaintiffs’ offered evidence, which appears quite limited, does not change my considered opinion that drop boxes (manned or unmanned) are not a source for voter fraud, including double voting and ballot harvesting.

In fact, as discussed above, I have no reason to believe that the use of unmanned drop boxes create a heightened risk of fraud where mail-in voters in the Commonwealth have been able to return their mail-in ballots through USPS mailboxes (e.g., the unmanned and unmonitored personal mailboxes at their residences or myriad other places where USPS mail is received) even before Act 77 was enacted. And there is no evidence that unmanned drop boxes provide any less protections against voter fraud than unmanned USPS mailboxes, which have been used in the Commonwealth and elsewhere for decades without challenge to their unmanned nature. Moreover, there seems to be no evidence that unmanned drop boxes facilitate or enable voter fraud, including double voting or ballot harvesting. They certainly do not do so in any fashion different from USPS mailboxes in which a would-be ballot harvester could just as easily deposit the multiple ballots he or she has “harvested” through any of the thousands of unmonitored USPS mailboxes (or other places mail can be received without detection).<sup>24</sup> Nonetheless, the Commonwealth, and any number of other jurisdictions, have lived with that risk for decades. My considered expert opinion is thus that the use of unmanned drop boxes will not make the Commonwealth’s election any less secure than it previously was.

## **VII. Conclusion**

The major impact of Act 77 has been to extend the right for every registered voter in the Commonwealth to participate in elections without appearing in person at polling places on Election Day. Put simply, the Commonwealth’s adoption of Act 77 made it a no-excuse mail-in voting state operating much like the other 33 states that already practice the same type of mail-in voting.

In addition to now being in line with other states that allow no-excuse mail-in voting, the Commonwealth is now in line with the multitude of other states where drop boxes are deployed to provide another means for voters to return their mail-in ballots. Evidence shows that such drop boxes help enhance the benefits of mail-in voting, like helping to increase turnout and providing safe places to return a mail-in ballot, without increasing the risk of voter fraud, if any, that was present before drop boxes were implemented. Indeed, even before the enactment of Act 77, voters

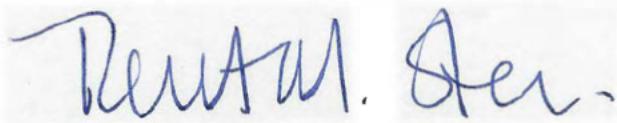
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<sup>24</sup> Because I understand that the Commonwealth has agreed to pay for the postage for all mail-in ballot applications and mail-in ballots delivered through the USPS for the General Election, this would-be ballot harvester would not even incur any additional cost from depositing ballots through the USPS than he or she would incur from depositing them through drop boxes.

in the Commonwealth had the option to return mail-in ballots to drop-off locations other than government buildings, including, for example, USPS mailboxes that are predominantly unmonitored. In summary, the empirical evidence has established that drop boxes (manned and unmanned) have been successfully used to enhance the benefits of mail-in voting and are not a source of voter fraud.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct to the best of my knowledge.

Dated: September 30, 2020



Robert M. Stein, Ph.D.

## **Appendix A: Curriculum Vitae**

**CURRICULUM VITAE**  
July, 2020

ROBERT M. STEIN  
Lena Gohlman Fox Professor of Political Science  
Rice University  
Houston, Texas 77251  
713-348-2795  
Email: Stein@rice.edu

Place of birth:  
New York, N.Y.

Married, two children

**Education**

B.A., Ohio Wesleyan University, Delaware, Ohio, 1972.

M.A., University of Wisconsin-Milwaukee, Milw., Wisc., 1974

Ph.D., University of Wisconsin-Milwaukee, Milw., Wisc., 1977

**Fields of Specialization**

Elections and election administration, Federalism and intergovernmental relations, state and local government, urban politics and public policy.

**Teaching Positions**

Lena Gohlman Fox Professor of Political Science, 1996

Fellow, James A. Baker III Institute for Public Policy, 2006

Professor, Department of Political Science, Rice University, 1989-1996.

Visiting Associate Professor and research scientist, Workshop in Political Theory-Public Policy and Department of Political Science, Indiana University, 1987-1988.

Associate Professor, Department of Political Science, Rice University, 1983-1989.

Assistant Professor, Department of Political Science, Rice University, 1979-1983.

Assistant Professor, University of Georgia, 1977-1978.

**Administrative positions**

Faculty Director, Center for Civic Engagement, Rice University 2007- present

Dean, School of Social Sciences, Rice University, 1996 - 2006

Interim Dean, School of Social Sciences, Rice University, 1995 - 1996

Chair, Department of Political Science, Rice University, 1994 - 1995

Director, Policy Studies Program (undergraduate major), Rice University, 1987- 1995

Director, Graduate Studies, Department of Political Science, Rice University, 1987- 1991.

Chair, Department of Political Science, Rice University, 1984-86

Director, Rice Institute of Policy Analysis Public Opinion Poll, 1983-present.

Political analyst, KHOU-TV, Houston, Tx. 1983- present

**Fellowships, awards, and offices**

Outstanding reviewer award, Political Research Quarterly 2010.

Best paper award on Federalism and Intergovernmental Relations for “Inter-Local Cooperation and the Distribution of Federal Grants,” by The section on Federalism and Intergovernmental Relations, American Political Science Association, 2004 (with Kenneth Bickers)

President, Urban Politics Subsection, American Political Science Association, 1999-2000.

Recipient, George R. Brown Award for Superior Teaching, Rice University, 1998.

President, Southwestern Political Science Association, 1998.

Recipient, Outstanding Mentor of Women in Political Science Award, Women’s Caucus for Political Science, American Political Science Association, 1996.

Special book award from the Urban Politics and Policy Section of the American Political Science Association for, Urban Alternatives: Private and Public Markets in the Provision of Local Services, 1991.

Research fellowship, Indiana University, Workshop in Political Theory and Public Policy, 1987-1988.

Recipient, George R. Brown Award for Superior Teaching, Rice University, 1987.

Fellowship, U.S. Advisory Commission on Intergovernmental Relations, 1978-1979.

**Research Grants and Contracts**

Optimizing vote-by-mail implementations on consumer grade equipment, Funded by NSF 2033923, 7/1/2020- 6/30/2021, co-PI, \$200,000.

Making voting safe for voters and poll workers: Meeting the challenge of the COVID-19 Virus, Funded Rice University, COVID-19 Initiative, 5/1/2020-12/31/2020, PI, \$45,300.

Election Day Vote Centers in Harris County, Texas. Funded by the Arnold Foundation, May 2019 – December 2020, \$100,000.

Hurricane Harvey: Longitudinal Survey, Funded by the National Science Foundation, January 2018 – December 2021, SBER1760292, \$200,000. Co-PI

Urban Flooding: Identifying where it floods and evaluating remedies. May 2018-September 2019. Kinder Institute, Ken Kennedy Institute and Office of Research, Rice University, \$74,450 Co-PI

2016 City of Houston Citizen Survey, September 2016-January 2017, City of Houston, \$23,500

Vote by mail, September 2014-September 2015, Pew Charitable Trusts, \$48,000.

Saturday Run-off Election Exit Poll Survey, City of Houston, October-November, 2013. \$4,000.

Prioritizing and selecting bridge management actions for heightened truck loads and natural hazards in light of funding allocation patterns, National Science Foundation, September 2012 - August, 2015. co-PI (\$1.2 million)

Phase 2 Development and enhancement of online storm risk calculator tool for public usage , City of Houston, Office of Public Safety and Homeland Security, November, 2012 - June 2013. co-PI (\$189,000)

NetSE: Large Urban-Scale Polymorphic Wireless Networks: Community-Driven Assessment, Design and Access, National Science Foundation, September 2010-2013, co-PI (\$1.9 million)

Development and enhancement of online storm risk calculator tool for public usage , City of Houston, Office of Public Safety and Homeland Security, January, 2011 - June 2011. co-PI (\$309,000)

Increasing turnout among the less engaged: A study of Election Day vote centers, Pew Charitable Trusts, September, 2007 – May, 2009, PI (\$260,000)

Independent Response of Complex Urban Infrastructures Subjected to Multiple Hazards, National Science Foundation, October 2007 – October 2010, co-PI (\$20,000)

Program evaluation, City of Houston, SAFEclic, traffic incident management program, July 2006-January 2008. PI (\$20,000)

Program evaluation, City of Houston, SAFEclic, traffic incident management program, February 2005-December 2005. PI (\$20,000)

Program Utilization Among Households Eligible for Head Start Enrollment, funded by the Harris County Department of Education, June, 2001. PI (\$15,000)R

The Changing Structure of Federal Aid and the Politics of the Electoral Connection. Funded by the National Science Foundation 2001-2002. SES0095997 Co-PI, January 2001-January 2003. PI (\$230,000)

Greater Harris County 9-1-1 Emergency Network Data Archive and Analysis January, 2000- January 2001. PI (\$15,000)

Evaluation of Greater Harris County Emergency Network: Round II, funded by the Greater Harris. PI County Emergency Network, September, 1993 - January, 1994. (\$5,000)

Evaluation of Greater Harris County 9-1-1 Emergency Network, funded by the Greater Harris County Emergency Network, January, 1992-July, 1993. PI (\$5,000)

Selective Universalization of Domestic Public Policy. Funded by the National Science Foundation (SES8921109) 1990-1992. PI (\$185,000)

Contracting for Municipal Services. Funded by the U.S. Advisory Commission on Intergovernmental Relations. January, 1986-1990. PI

The Fiscal Austerity and Urban Innovation. Funded by the U.S. Department of Housing and Urban Development. September, 1983-1985. PI

Research Associate, Field Network Evaluation Study of the Reagan Domestic Program. Princeton Urban and Regional Center, Princeton University. Funded by the Ford Foundation. 1982-1984. PI

Research Associate, Field Network Evaluation Study of the Community Development Block Grant: Round 8. Funded by the U.S. Department of Housing and Urban Development. Summer, 1982. PI

The Structural Character of Federal Grants-in-Aid. Funded by the U.S. Department of Housing and Urban Development. 1982-83. PI

The Allocation of Federal Grants-in-Aid. Funded by the U.S. Advisory Commission on Intergovernmental Relations. 1979-1981. PI

The Allocation of State-Local Aid: An Examination of Within State Variation. Funded by the U.S. Advisory Commission on Intergovernmental Relations. 1979-1981. PI

### **Editorial Positions**

editorial board member, *Journal of Election Technology and Systems*, 2013-2016

editorial board member, *American Political Science Review*, 2001- 2007

Executive Committee, American Politics, *American Political Science Review*, 2004-2007

editorial board member, *American Journal of Political Science*, 1994-1998

editorial board member, *Journal of Politics*, 1994-1998

editorial board member, *Social Science Quarterly*. 1993-present

editorial board member, *State and Local Government Review*. 1987-1992.

editorial board member, *Urban Affairs Review* (formerly, *Urban Affairs Quarterly*) 1996- 2000.

referee, *American Political Science Review*, *American Politics Quarterly*, *Journal of Urban Affairs*, *Urban Affairs Quarterly*, *Publius*, National Science Foundation.

### **Books**

Perpetuating the Pork Barrel: Policy Subsystems and American Democracy, Cambridge University Press, 1995, with Kenneth N. Bickers.

Federal Domestic Outlays, 1983-1990. M.E. Sharp, 1991, with Kenneth N. Bickers

Urban Alternatives: Public and Private Markets in the Provision of Local Services, Pittsburgh Press, 1990.

### Articles

"How Human Factors Can Help Preserve Democracy in the Age of Pandemics". Human Factors, forthcoming, With Philip Kortum, Claudia Zeigler Aceyman, Elizabeth Vann and Dan Wallach.

"How to Measure and Assess the Turnout Effects of Election Reforms," forthcoming, Journal of Political Institutions and Political Economy. With Andrew Menger.

"Choosing the less convenient way to vote: An anomaly in vote by mail elections," forthcoming, Political Research Quarterly. With Andrew Menger. Online first  
<https://journals.sagepub.com/doi/full/10.1177/10659129198900009>

"Waiting to vote in the 2016 Presidential Election: Evidence from a multi-jurisdiction Study," forthcoming, Political Research Quarterly. With Charles Stewart, Christopher Mann and others. Online first  
<https://journals.sagepub.com/doi/full/10.1177/1065912919832374>

"This Way Out," Scientific American, October 2018. Pp. 76-79. With Leonardo Duenas-Osorio and Devika Subramanian.

"Pedagogical Value of Polling-Place Observation by Students." PS: Political Science & Politics, 51:831-837 (October 2018). With Mann, Christopher B., Gayle A. Alberda, Nathaniel A. Birkhead, Yu Ouyang, Chloe Singer, Charles Stewart, Michael C. Herron, et al. <https://doi.org/10.1017/S1049096518000550>.

"Reducing the undervote with vote by mail," American Politics Research. 46(6):1039-1064 (September 2018). With Andrew Menger and Greg Vonnahme.

"Enlisting the public in facilitating election administration: A field experiment," Public Administration Review, 78(6):892-903 (December 2018), with Andrew Menger.

"Survey Experiments with Google Consumer Surveys: Promise and Pitfalls for Academic Research in Social Science." Political Analysis 24(3):256-373 (September 2016), with Philip Santaso and Randolph Stevenson.

"Election Administration During National Disasters and Emergencies: Hurricane Sandy and the 2012 Election." Election Law Journal 14:1-8 (January 2016).

"The social and private benefits of preparing for natural disasters," International Journal of Mass Emergencies and Disasters. 32:459-483 (August 2014), with Birnur Buzcu-Guven, Leonardo Dueñas-Osorio, Devika Subramanian.

"Building and validating geographically refined hurricane wind risk models for residential structures," Natural Hazards Review, 15(3):1-10 (November 2014), with Devika Subramanian, Leonardo Dueñas-Osorio, Josue Salazar

"How risk perceptions influence evacuations from hurricanes and compliance with government directives," Policy Studies Journal, 41(2):319-341 (April 2013), with Birnur Buzcu-Guven, Leonardo Dueñas-Osorio, Devika Subramanian, and David Kahle

"Early voting and campaign news coverage," Political Communication, 30:278-396 (April 2013), with Johanna Dunaway

"The effect of election day vote centers on voter participation," Election Law Journal, 11(4):291-301 (September 2012) with Greg Vonnahme.

"Where, when and how we vote: Does it matter?" Social Science Quarterly.93(3):693-712.. (September 2012) with Greg Vonnahme.

"Prospectus for the Future Administration of Elections," Baker Center Journal of Applied Public Policy 4(1):45-57. (Spring, 2012)

"Engineering-based hurricane risk estimates and comparison to perceived risks in storm-prone areas," Natural Hazards Review, 13(1):1-12 (Spring 2012). with Leonardo Duenas-Osorio, Devika Subramanian and Birnur Girnur.

"Voting at non-precinct polling places: A review and research agenda," Election Law Journal, 10:307-11 (October 2011) with Greg Vonnahme.

"Interface network models for complex urban infrastructure systems." Journal of Infrastructure Systems, 17(4): 138-150 (2011), with Winkler, J., L. Dueñas-Osorio, R. Stein, and D. Subramanian.

"Performance assessment of topological diverse power systems subjected to hurricane events," Reliability Engineering and System Safety, 95:323-336. (April 2010). with James Winkler, Leonardo Duenas-Osorio and Devika Subramanian.

"Who evacuates when hurricanes approach? The role of risk, information and location," Social Science Quarterly. 91:816-834.(September 2010). With Leonardo Duenas-Osorio and Devika Subramanian

"Crunching collisions," Roads and Bridges 13:2 (April 2009), with Robert Dahnke, Ben Stevenson, and Tim Lomax.

"Voting technology, election administration and voter performance," Election Law Journal, 7:123-135 (April 2008) with Greg Vonnahme, Michael Byrne and Daniel Wallach.

"Engaging the unengaged voter: Voter centers and voter turnout," Journal of Politics. 70:487-497 (April 2008) with Greg Vonnahme.

"Assessing the Micro-Foundations of the Tiebout Model," Urban Affairs Review, 42:57-80 (September 2006), with Kenneth Bickers and Lapo Salucci.

"Who is Held Responsible When Disaster Strikes? The Attribution of Responsibility for a Natural Disaster in an Urban Election," Journal of Urban Affairs, 28:43-54 (2006) with Kevin Arceneaux.

"Voting for Minority Candidates in Multi-Racial/Ethnic Communities," Urban Affairs Review, 41:157-181 (November 2005) with Stacy Ulbig and Stephanie Post.

"Inter-Local Cooperation and the Distribution of Federal Grant Awards," Journal of Politics, 66:800-22 (August 2004) with Kenneth Bickers.

"Language Choice, Residential Stability, and Voting among Latino-Americans," Social Science Quarterly, 84:412-24, (June 2003), with Martin Johnson and Robert Wrinkle.

"Public Support for Term Limits: Another Look at Conventional Thinking." Legislative Studies Quarterly, 27:459-480. (August 2002) with Martin Johnson and Stephanie Shirley Post.

"Contextual Data and the Study of Elections and Voting Behavior: Connecting Individuals to Environments." Electoral Studies, 21:63-77 (March 2002), with Martin Johnson, W. Phillips Shivley. Also appearing in *The Future of Electoral Studies*. Mark N. Franklin and Christopher Wlezien, eds. Oxford: Elsevier Press (2003).

"The Congressional Pork Barrel in a Republican Era," Journal of Politics, 62:1070-1086 (November, 2000) with Kenneth Bickers.

"State Economies, Regional Governance, and Urban-Suburban Economic Dependence," Urban Affairs Review, 36:46-60 (Spring, 2000) with Stephanie Shirley Post.

"Reconciling Context and Contact Effects on Racial Attitudes," Political Research Quarterly. 53:285-303 (June, 2000), with Stephanie Shirley Post and Allison Rinden.

"The Micro Foundations of the Tiebout Model," Urban Affairs Review 34:76-93 (September, 1998) with Kenneth Bickers.

"Early Voting," Public Opinion Quarterly. 62:57-70 (Spring, 1998).

"Voting Early, But Not Often," Social Science Quarterly 78:657-677 (September, 1997) with Patricia Garcia-Monet.

"Building Majority Coalitions for Sub-majority Benefit Distributions," Public Choice 91:229-249 (June, 1997). with Kenneth Bickers.

"The Electoral Dynamics of the Federal Pork Barrel," American Journal of Political Science, 40:1300-1326 (November, 1996) with Kenneth Bickers.

"Privatization and the Arrangement of City Services," Estudios De Economia, 23:323 (August, 1996)

"A Portfolio Theory of Policy Subsystems," Administration and Society, 26:158-184 (August, 1994). with Kenneth Bickers

"Congressional Elections and the Pork Barrel," Journal of Politics , 56:377-399 (November 1994)

"Explaining State Aid Allocations: Targeting Within Universalism," Social Science Quarterly, 75:524-540 (September, 1994) with Keith E. Hamm

"Universalism and the Electoral Connection: A Test and Some Doubts," Political Research Quarterly, 47:295-318 (June, 1994) with Kenneth N. Bickers.

"Response to Weingast's 'Reflections on Distributive Politics and Universalism,'" Political Research Quarterly: 47:329-334 (June, 1994) with Kenneth N. Bickers.

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### **Chapters in edited volumes**

"Polling Place Quality," in Kathleen Hale and Bridgett A. King, eds., *The Future of Election Administration*, Palgrave. 2019: 83-100

"Help America Vote Act of 2002" in *Voting and Political Representation in America: Issues and Trends* Edited by Mark P. Jones. Forthcoming, 2019 Santa Barbara, CA: ABC-CLIO

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"Polling Place Practices," in *Electoral Performance*, Charles Stewart III and Barry Burden, eds. Cambridge University Press, 2014:166-187. With Greg Vonnahme

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"The Political Market for Intergovernmental Cooperation," in *Self-Organizing Federalism: Collaborative Mechanisms to Mitigate Institutional Collective Action Dilemmas*, eds., Richard C. Feiock and John T. Scholz. Cambridge University Press. 2010:161-178.. With Kenneth N. Bickers and Stephanie Post

"Local Services, Provision and Production," in Encyclopedia of Public Administration and Public Policy, New York, Marcel Dekker, 2003: 734-748.

"The Politics of Revenue and Spending Policies," in John Pelissero, ed. Cities, Politics, and Policy. Washington, D.C.: CQ Press. 2002:217-236.

"Implications for Citizen Participation," in Paul Schumacher and Burdette Loomis eds. Choosing a President The Electoral College and Beyond. New York, Catham House, 2002 with Paul Johnson, Daron Shaw and, Robert Weissberg. Pp. 125-142

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"Contracting for Municipal Services," in P. Seidenstat, S. Hakim and G. Bowman eds. Privatization of the Justice System, McFarland and Co. Publishers. 1992: 82-107, with Delores Martin.

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"The Texas Response to Reagan's New Federalism Programs: The Early Years," pp. 124-159 in, L. Bender and J. Stever, (eds.) Managing the New Federalism, Denver: Westview Press, 1986 with S.A. MacManus.

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"The Impact of Socio-Economic Environment on Revenue Policies," pp. 133-172. in, R. Bingham, B. Hawkins, and F. Hebert, The Politics of Raising State and Local Revenues, Praeger, 1978 with R. Bingham, B. Hawkins, and R. Robertson.

"Grant Seeking and the Allocation of Federal Grant-in-Aid Monies: The Case of Southeastern Wisconsin," pp. 199-219 in, John P. Blair and Ronald S. Edari, (eds.), Milwaukee's Economy: Federal Programs, Local Resources and Community Action, Federal Reserve Bank of Chicago, 1978

"Substate Regionalism: Another View From the States," pp. 69-102 in, Charles Tyer (ed.) Substate Regionalism in the United States: Perspectives and Issues, University of South Carolina Press, 1978

#### Recent papers, completed manuscripts, conference papers and invited presentations

"Choosing the less convenient way to vote: An anomaly in vote by mail elections," Election Science Meeting, June 2019, University of Pennsylvania, Phila., PA

"Compositional effects of vote by mail elections," presented at VBMcon: A Conference to discuss vote by mail election reform, June 20, 2019, Washington, D.C.

"Vote fraud and errant voting," Invited presentation at Department of Political Science, University of Nebraska, Lincoln, NE. April 25, 2013.

"Polling place practices," Prepared for presentation at the Measure of Elections Conference, June 18-19, 2012, Massachusetts Institute of Technology, Boston, MA

"Where, when and how we vote: Does it matter?" presented at the Scottish National Election Commission, Strathclyde University, Glasgow, Scotland. November 12-15, 2010.

"The future of elections," presented at the *Future of Governance Conference*, Howard Baker Institute of Government, University of Tennessee, Knoxville, Tx. October 14-15, 2010.

"Cost of elections," Presented at the 2010 Meeting of the Midwest Political Science Association, Chicago, Ill. April 3-5, 2000 with Greg Vonnahme.

"Early voting and campaign news coverage," 2010 Meeting of the American Political Science Association,

Washington, D.C., Sept 1-3.

“The cost of elections.” Report prepared for the Pew Charitable Trusts, 2009. With Greg Vonnahme.

“The effects of early voting on congressional campaign expenditures.” Presented at the 2009 Meeting of the Midwest Political Science Association, Chicago, Ill. April 13-15, 2009 With Marvin McNeese

“The effects of Election Day vote centers on voter experiences.” Presented at the 2008 Meeting of the Midwest Political Science Association, Chicago, Ill. April 3-5, 2008. With Greg Vonnahme

Whither the Challenger: Congressional Elections in Metropolitan America, Presented at the 2005 Meetings of the American Political Science Association, Washington, D.C., September 1-3, with Kenneth Bickers.

Assessing the Micro-Foundations of the Tiebout Model Presented at the 2005 Meetings of the Midwest Political Science Meetings, Chicago, Ill. April 2-5, with Kenneth Bickers and Lapo Salucci.

Electoral Reform, Party Mobilization and Voter Turnout Presented at the 2004 Meetings of the Midwest Political Science Meetings, Chicago, Ill. April 21-23, with Jan Leighley, Chris Owens.

The Role of Candidates and Parties in Linking Electoral Reforms with Voter Participation. Presented at the 2003 Meetings of the Midwest Political Science Meetings, Chicago, Ill. April 21-23, with Jan Leighley, Chris Owens.

Voting for Minority Candidates in Multi-Racial/Ethnic Communities. Presented at the 2003 Meetings of the Midwest Political Science Meetings, Chicago, Ill. April 21-23, with Stacy Ulbig and Stephan Post.

The within congressional district electoral connection. Presented at the 2002 Meetings of the American Political Science Association, Boston, MA August 28-September 2, with Kenneth Bickers.

Who Will Vote? The Accessibility of Intention to Vote and Validated Behavior at the Ballot Box, Presented at the 2001 Meetings of the American Political Science Association, San Francisco, CA., August 28-September 2, with Martin Johnson

Contextual Explanations of Presidential Vote Choice, Presented at the 2001 Meeting of the Midwest Political Science Association, Chicago, Illinois, April 13-15, with W.Philps Shivley and Martin Johnson.

The Changing Structure of Federal Aid and the Politics of the Electoral Connection Coalitions. Presented at the 2000 Meetings of the American Political Science Association, Washington, D.C., September 1-4. With Kenneth Bickers.

Accessibility and Contextual Explanations of White Racial Attitudes. Presented at the 2000 Meetings of the American Political Science Association, Washington, D.C., September 1-4. With W.Philps Shivley and Martin Johnson

Information, Persuasion and Orphaned Voters. Presented at the 1999 Meeting of the American Political Science Association, Atlanta, GA., September 1-4. With Martin Johnson

The Federal Pork Barrel and the Formation of Intergovernmental Grant-Seeking Coalitions Presented at the 1999 Meeting of the American Political Science Association, Atlanta, GA., September 1-4. With Kenneth Bickers.

The Congressional Pork Barrel in a Republican Era. Presented at the 1999 Meeting of the Midwest Political Science Association, Chicago, Illinois, April 13-15. With Kenneth Bickers

The Local Public Goods Market: A Definition, Measure, and Test, Presented at the 1998 Meeting of the American Political Science Association, Boston, MA, Sept. 3-6 10-12. With Stephanie Shirley Post.

The Ties that Bind: Urban and Suburban Dependency. Presented at the 1998 Meeting of the Midwest Political Science Association, Chicago, Illinois, April 10-12. With Stephanie Shirley Post

### **Professional Associations**

President, Urban Subsection, American Political Science Association, 1999-2000

President, Southwest Political Science Association, 1997-1998

Chair, Nominations committee, Southern Political Science Association, 1995

Nomination committee, Southern Political Science Association, 1993-94

Executive Council, Southwest Political Science Association, 1992-1994

Chair, nominations committee, 1993-94, Southwest Political Science Association.

Section Head, State and Local Government, 1993, Southern Political Science Association Meetings.

Section Head, State and Intergovernmental Relations, 1992 Midwest Political Science Association .

Executive Board, Urban Politics Section, American Political Science Association, 1990-1992

Executive Board, Southwestern Political Science Association, 1985-1991, 1993-1994

Program Chair, Southwestern Political Science Association Annual Meetings, 1983

Section Head, Intergovernmental Relations, Southern Political Science Association Meetings. 1983

### **Ph. D. Thesis advisees**

Albert Ellis, Ph.D. 1989, Associate Professor (deceased), University of Texas, Corpus Christi

Stephanie Post, Ph.D. 1998, Director, Center for Civic Engagement, Rice University

Martin Johnson, Ph.D. 2002. Professor and Chair, University of California-Riverside

Gavin Dillingham, Ph.D. 2004. Research Scientist, Houston Advanced Research Center

Johanna Dunaway, Ph.D. 2006. Associate Professor, Louisiana State University

Gregory Vonnahme, Ph.D. 2009. Assistant Professor, University of Missouri-Kansas City

Marvin McNeese, Ph.D. 2015

Andrew Menger, Ph.D. expected 2017

### **Teaching**

Urban Politics (undergraduate)

Public Policy (graduate and undergraduate)

Bureaucracy and Public Policy

Policy Implementation

Federalism

Political Behavior

### **Recent expert testimony**

Expert Report in the case of Mark Wandering Medicine et al. v. Linda McCulloch et al. [voting rights case in the state of Montana] February-June, 2014.

Expert Report in the Thomas Poor Bear, et al vs. The County of Jackson, South Dakota [voting rights case in the state of South Dakota]. June-November, 2015

Expert Report in the case of Martin Cowen, et al. vs Brian P. Kemp [ballot access case]. January-May, 2018

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